



VA COOPERATIVE STUDIES PROGRAM # 424

Clinical Outcomes Utilizing Revascularization and Aggressive DruG Evaluation

Operations Memo No. 26

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Subj: **Definition of "classic" or "definite" angina**
To: All Study Personnel
Thru: Trial Leadership

Definition of "classic" or "definite" angina for enrollment of patients in whom non-invasive testing for myocardial ischemia cannot be readily obtained.

For the purposes of enrolling eligible patients with "classic", or "definite", angina without objective signs of myocardial ischemia in the COURAGE Trial, we will adhere to the definitions as described in the ACC/AHA/ACP-ASIM Guidelines for the Management of Patients with Chronic Stable Angina¹.

We will subdivide patients according to whether the presentation is unstable angina (UA) or chronic stable angina (CSA), as described below.

I. Presentations of Unstable Angina (UA):

There are three principal presentations of UA: 1) rest angina (angina commencing when the patient is at rest), 2) new-onset severe angina, and 3) increasing angina (Table 1).

Table 1. Three Principal Presentations of UA

Rest angina	Angina occurring at rest and prolonged, usually > 20 minutes.
New-onset angina	New-onset angina of at least CCS Class III severity.
Increasing angina	Previously diagnosed angina that has become distinctly more frequent, longer in duration, or lower in threshold (i.e., increased by ≥ 1 CCS class to at least CCS Class III severity).

Angina severity will be classified according to the Canadian Cardiovascular Society (CCS) system (Table 2).

Table 2. Grading of Angina Pectoris According to CCS Classification²

Class	Description of Stage
I	"Ordinary physical activity does not cause...angina," such as walking or climbing stairs. Angina occurs with strenuous, rapid, or prolonged exertion at work or recreation.
II	"Slight limitation of ordinary activity." Angina occurs on walking or climbing stairs rapidly; walking uphill; walking or stair climbing after meals; in cold, in wind, or under emotional stress; or only during the few hours after awakening. Angina occurs on walking > 2 blocks on the level and climbing > 1 flight of ordinary stairs at a normal pace and under normal conditions.
III	"Marked limitations of ordinary physical activity." Angina occurs on walking 1 to 2 blocks on the level and climbing 1 flight of stairs under normal conditions and at a normal pace.
IV	Inability to carry on any physical activity without discomfort-anginal symptoms may be present at rest."

II. Presentations of Chronic Stable Angina (CSA):

Angina is characterized as a deep, poorly localized chest or arm discomfort that is reproducibly associated with physical exertion or emotional stress and is relieved promptly (i.e., < 5 min) with rest and/or the use of sublingual nitroglycerin (NTG). Patients with UA may have discomfort that has all of the qualities of typical angina except that the episodes are more severe and prolonged, may occur at rest, or may be precipitated by less exertion than previously. Some patients may have no chest discomfort but present solely with jaw, neck, ear, arm, or epigastric discomfort. If these symptoms have a clear relationship to exertion or stress or are relieved promptly with NTG, they should be considered equivalent to angina. Occasionally, such "anginal equivalents" that occur at rest are the mode of presentation of a patient with UA, but without the exertional history, it may be difficult to recognize the cardiac origin. Other difficult presentations of the patient with UA include those without any chest (or equivalent) discomfort. Isolated unexplained new-onset or worsened exertional dyspnea is the most common anginal equivalent symptom, especially in older patients; others include nausea and vomiting, diaphoresis, and unexplained fatigue. Elderly patients, especially women with ACS, often present with atypical angina.

III. Features of "Classic", or "Definite" Angina:

There are four cardinal manifestations of "classic" or "definite" angina: character, site and distribution, provocation, and duration. Patients with "definite" angina typically have substernal or retrosternal chest discomfort (pressure, squeezing, tightness, burning) that may also be located in the midepigastriac area. The discomfort can radiate to the arm (upper or lower), neck, jaw, ear or teeth, and is typically precipitated by physical exertion, stress, meals, emotion, etc., are frequently stereotypic in a given patient, and may occur with both provocation and at rest, or with minimal activity. The duration of angina is usually minutes (unless it is prolonged rest angina indicative of an acute coronary syndrome), and the discomfort typically subsides promptly with rest (or cessation of the offending activity), or following sublingual nitroglycerin.

Features that are not characteristic of myocardial ischemia include the following:

- ◆ Pleuritic pain (i.e., sharp or knife-like pain brought on by respiratory movements or cough)
- ◆ Primary or sole location of discomfort in the middle or lower abdominal region
- ◆ Pain that may be localized at the tip of 1 finger, particularly over the left ventricular (LV) apex
- ◆ Pain reproduced with movement or palpation of the chest wall or arms
- ◆ Constant pain that lasts for many hours
- ◆ Very brief episodes of pain that last a few seconds or less
- ◆ Pain that radiates into the lower extremities

¹Gibbons RJ, Chatterjee K, Daley J, et al. ACC/AHA/ACP-ASIM guidelines for the management of patients with chronic stable angina. J Am Coll Cardiol 1999;33:2092-197

²Campeau L. Grading of angina pectoris (letter). Circulation 1976;54:522-3